

JUL 16 2004

PTO/SB/08A (08-03)

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	6
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**Complete if Known**

Application Number	10/759,558
Filing Date	January 16, 2004
First Named Inventor	McLaughlin
Art Unit	3737
Examiner Name	Unknown
Attorney Docket Number	PA2632US

## U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
M		US- 4,252,026	02-24-1981	Robinson	
		US- 4,398,540	08-16-1983	Takemura et al.	
		US- 4,409,982	10-18-1983	Plessset et al.	
		US- 4,644,795	02-24-1987	Augustine	
		US- 4,803,990	02-14-1989	Bonnefous et al.	
		US- 4,853,904	08-01-1989	Pesque	
		US- 4,917,097	04-17-1990	Proudian et al.	
		US- 5,119,342	06-02-1992	Harrison, Jr. et al.	
		US- 5,134,884	08-04-1992	Anderson	
		US- 5,140,558	08-18-1992	Harrison, Jr. et al.	
		US- 5,269,309	12-14-1993	Fort et al.	
		US- 5,278,757	01-11-1994	Hocter et al.	
		US- 5,291,090	03-01-1994	Dias	
		US- 5,295,485	03-22-1994	Shinomura et al.	
		US- 5,390,676	02-21-1995	Katakura	
		US- 5,462,057	10-31-1995	Hunt et al.	
		US- 5,483,963	01-16-1996	Butler et al.	
		US- 5,505,203	04-09-1996	Deitrich et al.	
		US- 5,541,468	07-30-1996	Frey et al.	

## FOREIGN PATENT DOCUMENTS

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5-27-04

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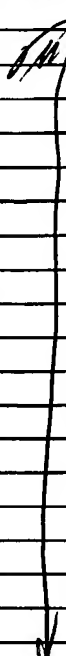
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**Complete if Kn wn**Sheet **2** of **6**

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		US- 5,559,388	09-24-1996	Lorraine et al.	
		US- 5,590,658	01-07-1997	Chiang et al.	
		US- 5,617,862	04-08-1997	Cole et al.	
		US- 5,628,320	05-13-1997	Teo	
		US- 5,648,942	07-15-1997	Kunkel, III	
		US- 5,667,373	09-16-1997	Wright et al.	
		US- 5,720,708	02-24-1998	Lu et al.	
		US- 5,722,412	03-03-1998	Pflugrath et al.	
		US- 5,738,099	04-14-1998	Chang	
		US- 5,740,806	04-21-1998	Miller	
		US- 5,744,898	04-28-1998	Smith et al.	
		US- 5,782,769	07-21-1998	Hwang et al.	
		US- 5,793,701	08-11-1998	Wright et al.	
		US- 5,795,297	08-18-1998	Daigle	
		US- 5,817,024	10-06-1998	Ogle et al.	
		US- 5,839,442	11-24-1998	Chiang et al.	
		US- 5,840,033	11-24-1998	Takeuchi	
		US- 5,851,186	12-22-1998	Wood et al.	
		US- 5,873,830	02-23-1999	Hossack et al.	

FOREIGN PATENT DOCUMENTS						
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Sheet 3 of 6

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		US- 5,893,363	04-13-1999	Little et al.	
		US- 5,897,501	04-27-1999	Wildes et al.	
		US- 5,904,652	05-18-1999	Gilbert et al.	
		US- 5,905,692	05-18-1999	Dolazza et al.	
		US- 5,908,389	06-01-1999	Roundhill et al.	
		US- 5,919,138	07-06-1999	Ustuner	
		US- 5,925,967	07-20-1999	Toda	
		US- 5,951,479	09-14-1999	Holm et al.	
		US- 5,957,846	09-28-1999	Chiang et al.	
		US- 5,964,709	10-12-1999	Chiang et al.	
		US- 5,970,025	10-19-1999	Cole et al.	
		US- 5,973,438	10-26-1999	Toda	
		US- 6,043,590	03-28-2000	Gilmore	
		US- 6,055,861	05-02-2000	Banta, Jr. et al.	
		US- 6,063,030	05-16-2000	Vara et al.	
		US- 6,066,099	05-23-2000	Thomenius et al.	
		US- 6,089,096	07-18-2000	Alexandru	
		US- 6,133,545	09-05-2000	Chiao et al.	
		US- 6,126,608	10-03-2000	Kemme et al.	

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Sheet

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of

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First Named Inventor	McLaughlin
Art Unit	3737
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		US- 6,135,960	10-24-2000	Holmberg	
		US- 6,135,961	10-24-2000	Pflugrath et al.	
		US- 6,138,513	10-31-2000	Barabash et al.	
		US- 6,139,498	10-31-2000	Katsman et al.	
		US- 6,174,286	01-16-2001	Ramamurthy et al.	
		US- 6,203,498	03-20-2001	Bunce et al.	
		US- 6,230,043	05-08-2001	Johnson	
		US- 6,238,346	05-29-2001	Mason	
		US- 6,251,073	06-26-2001	Imran et al.	
		US- 6,282,963	09-04-2001	Haider	
		US- 6,309,356	10-30-2001	Ustuner et al.	
		US- 6,514,206	02-04-2003	Maxwell et al.	
		US- 6,551,246	04-22-2003	Ustuner et al.	
		US- 6,569,102	05-27-2003	Imran et al.	
		US- 6,618,206	09-09-2003	Tarakci et al.	
		US- 6,695,783	02-24-2004	Henderson et al.	
		US- D461,814	08-20-2003	Felix et al.	
		US- D462,446	09-03-2002	Felix et al.	
		US- D467,002	12-10-2002	Felix et al.	

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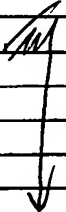
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		US- D469,877	02-04-2003	Felix et al.	
		US- RE35,148	01-23-1996	Lizzi et al.	
		US- 2002-0188199	12-12-2002	McLaughlin et al.	
		US- 2003-0078497	04-24-2003	Ji et al.	
		US- 2004-0024316	02-05-2004	Xi et al.	
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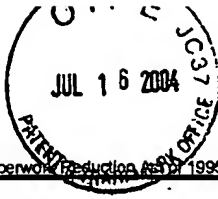
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NON PATENT LITERATURE DOCUMENTS			
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		A. Pesavento et al., "Compression of Ultrasonic RF Data," IEEE Proc. Ultrasonics Symposium, 1997.	
		K. Rigby, et al., "Real Time Adaptive Imaging," IEEE Ultrasonics Symposium, pp. 1603-06, 1988.	
		C.M. Fabian, et al., "Development of a Parallel Acquisition System of Ultrasound Research," IEEE Proc. Ultrasonics Symposium, 2001.	
		C.M. Fabian, "Development of a Parallel Acquisition System for Ultrasound Research," Department of Electrical Eng., University of Virginia, (date unknown), pp. 1-9.	

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